Financial
Services
Commission

A Statistical Perspective On Pension Plans Registered In Saskatchewan

Pensions Division

Saskatchewan

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Introduction

The statistics reported in the Statistical Trends section were derived from Annual Information Returns filed with the Pensions Division in 2003 and 2004 for plan year ends from January 1, 2003 to December 31, 2003, inclusive.

The Funding Defined Benefits Plans section is based on the most recently filed actuarial valuation for each defined benefit plan registered with the Pensions Division. As actuarial valuations are required to be filed every third year, some of the valuation statistics date as far back as January 1, 2001.

This report focuses on the plans registered with the Pensions Division. It should be noted, however, that a substantial number of Saskatchewan members participate in plans that are not regulated by the Division. Many plans are registered with another provincial pension authority or the federal government. Several plans are not supervised by any pension authority.

At the beginning of 2004, 200,213 Saskatchewan workers participated in 1,293 employer-sponsored pension plans:

Saskatchewan Worker Participation in Pension Plans		
Jurisdiction of Registration	**# of Plans**	**# of Members**
Saskatchewan Pensions Division	397	138,357
Another provincial pension authority	712	24,863
Federal government	174	20,955
Not supervised by pension authority	10	16,038
Total	**1,293**	**200,213**

About 49% of paid workers in Saskatchewan participate in a registered pension plan. Nationally, the comparable rate is 40%. Saskatchewan has a higher than average proportion of its paid workers in the public sector where coverage is close to universal. The coverage rate in the private sector is in the range of 25% to 30%. About 64% of the 200,213 plan members work for a public sector employer.

In Canada, about 18% of plan members participate in a defined contribution or money purchase plan. In Saskatchewan, about 44% of members belong to such plans.

Statistical Highlights

Table 1- Statistics on the Activities of the Pensions Division

Fiscal Year	New Plans Registered	Plan Terminations Reviewed	Annual Information Returns Reviewed	Plan Amendments Registered
1993/94	20	24	375	137
1994/95	12	32	382	370
1995/96	19	29	397	370
1996/97	28	27	362	153
1997/98	42	29	366	215
1998/99	29	20	407	235
1999/00	12	15	410	190
2000/01	14	24	399	201
2001/02	17	19	362	281
2002/03	11	18	399	226
2003/04	22	19	366	151
2004/05	22	14	388	123

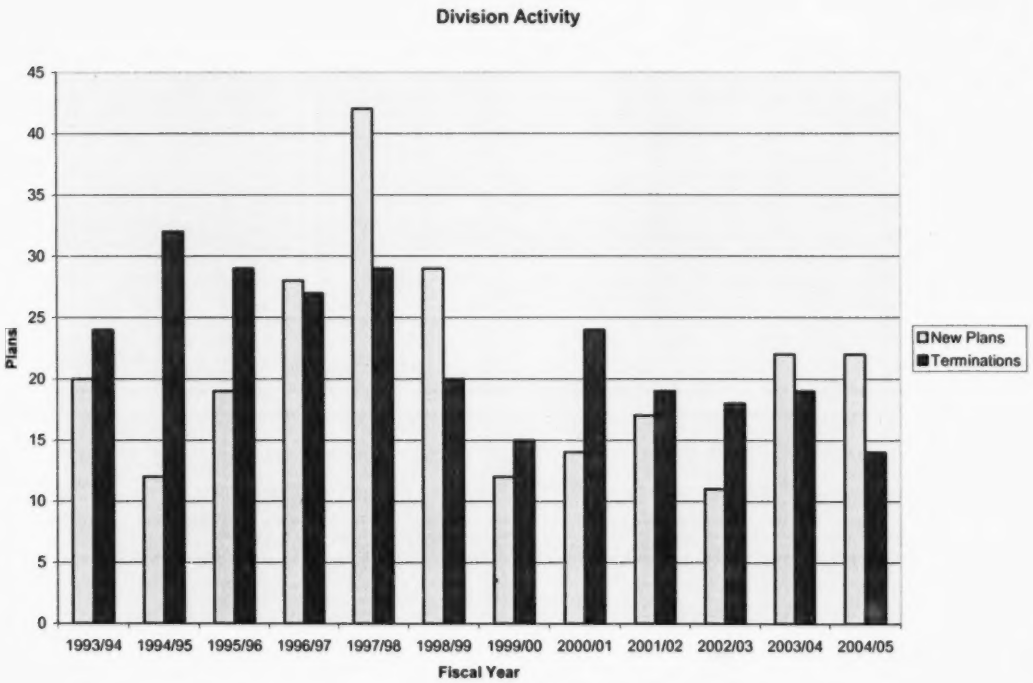


Table 2

# of Active Members by Size of Pension Plan
for the Period January 1, 2003 to December 31, 2003

Member Ranges	# of Members	# of Plans	Average Members Per Plan
1 - 10	381	127	3
11 - 15	447	34	13
16 - 20	312	17	18
21 - 50	2,254	69	33
51 – 100	3,241	48	68
101 – 200	3,813	24	159
201 – 300	3,862	15	257
301 – 400	2,069	6	345
401 – 500	2,344	5	469
501 – 600	3,329	6	555
601 – 1000	8,359	11	760
1001 – 2000	12,826	9	1,425
2001 – 3000	0	0	0
3001 – 4000	3,988	1	3,988
4001 – 5000	4,170	1	4,170
5001 – 10000	0	0	0
10001 and over	97,592	5	19,518
Totals	**148,987**	**378**	**394**
Previous Year	**146,371**	**368**	**398**

The table is based on annual information returns filed for plan years ending in 2003 and includes plans registered in Saskatchewan with some members employed in other provinces, but excludes 7 plans with no active members.

Membership is concentrated in a few plans. The three largest plans accounted for 51% of the total number of members and five plans held 66% of all members. Twenty-six plans (7% of the total number of plans) had 82% of the total number of members.

Table 3

Contributions to Supervised Plans
for Period January 1, 2003 to December 31, 2003

MEMBER CONTRIBUTIONS	
Required member contributions	$ 250,968,453
Additional voluntary contributions	11,290,144
Total member contributions	**$ 262,258,597**
EMPLOYER CONTRIBUTIONS	
Required employer contributions	$ 337,758,158
Less termination/death forfeitures used	(547,270)
Less surplus assets used	(28,650,795)
Net current service contributions	**$ 308,560,093**
Unfunded liability special payments	$ 10,092,943
Solvency deficiency special payments	13,404,946
Pre-1993 special payments	1,416,700
Total special payments	**$ 24,914,589**
Total employer contributions	**$ 333,474,982**
TOTAL CONTRIBUTIONS	**$ 595,733,279**
PREVIOUS YEAR	**$ 540,408,242**

The table is based on annual information returns filed for plan years ending in 2003 and includes plans registered in Saskatchewan with some members employed in other provinces.

Fewer plans are using surplus assets. Twenty-nine plans reported using surplus assets totalling $28,650,795 in 2003, compared to 49 plans which reported the use of surplus assets totalling $49,563,197 in 2002.

Special payments to amortize unfunded liabilities and solvency deficiencies have increased since the last report. In 2003, special payments totalling $24,914,589 were reported compared to special payments of $18,447,897 reported in 2002.

Table 4

# of Active Members and Market Value by Pension Plan Type for Period January 1 to December 31, 2003			
Plan Type	**# of Plans**	**# of Members**	**Market Value**
Final Average	17	20,318	2,628,401,679
Average Best	17	46,175	4,888,685,203
Career Average	12	2,208	133,442,785
Flat Benefit	20	7,148	407,174,504
Composite	0	0	0
Hybrid	4	787	43,409,841
Designated Plan	78	126	33,336,176
Subtotal	**148**	**76,762**	**$8,134,450,188**
Defined Contribution	230	72,225	6,351,477,265
Total	**378**	**148,987**	**$14,485,927,453**

The table is based on annual information returns filed for plan years ending in 2003 and includes plans registered in Saskatchewan with some members employed in other provinces, but excludes 7 plans with no active members.

Defined benefit plans were, on average, bigger than defined contribution plans. 62% of the pension plans were defined contribution, but those plans contained 48% of the total plan members and 44% of the total assets.

Table 5

# of Active Members by Market Value of Pension Plan for the Period January 1, 2003 to December 31, 2003				
Market Value Range	**# of Members**	**# of Plans**	**Total Market Value**	**Average Market Value**
Under $100,000	366	38	$1,942,120	$51,108
Under $500,000	2,307	137	$36,001,418	$262,784
Under $1 million	1,675	47	$33,865,224	$720,537
Under $5 million	4,203	70	$138,738,753	$1,981,982
Under $10 million	4,516	24	$175,102,299	$7,295,929
Under $100 million	20,748	45	$1,378,502,214	$30,633,383
Under $500 million	8,669	9	$1,873,498,937	$208,166,549
$500 million and over	106,503	8	$10,848,276,488	$1,356,034,561
Total	**148,987**	**378**	**$14,485,927,453**	**$38,322,559**

Funding Defined Benefit Plans

You will note that the membership data on the next page does not reconcile to that reported in the Statistical Highlights section. The data in this section is from current actuarial valuations filed with the Division. The Statistical Highlights section uses data obtained by the more recent Annual Information Returns.

Highlights of the statistics on the funding of defined benefit plans include:

- The plans are relatively immature. Active members outnumber other beneficiaries by more than a 2 to 1 margin. (Table 6)

- The funding of plans has deteriorated since our last report, largely due to negative investment experience in 2001 and 2002 and a drop in long-term interest rates. The actuarial value of plan assets was $8 billion compared with the actuarial value of plan liabilities of $7.8 billion, meaning the system as a whole has a surplus of about $200 million. (Tables 7 and 8) In our last report, the system was in surplus by about $400 million.

- On a going concern basis, 94 plans had an unfunded liability compared to 58 plans with a surplus. In our last report, 51% of plans registered with the Division had an unfunded liability. Total unfunded liabilities of plans has grown from $194 million to $280 million, while total surplus assets of plans has fallen from $583 million to $499 million. Ten plans accounted for 90 percent of the $280 million in unfunded liabilities. (Tables 9 and 10)

- As well, the membership profile of plans with an unfunded liability has changed since our previous report. Previously, plans with an unfunded liability had 764 members and former members per plan, while plans with surplus had 767 beneficiaries per plan. Currently, plans with an unfunded liability have 639 members and former members, while plans with surplus assets have 934 beneficiaries per plan.

- Many of the designated plans carry an unfunded liability. (Table 9) By "a designated plan", we mean a plan that meets the criteria of section 8515 of the *Income Tax Regulations* (Canada). Such plans are generally for connected persons and senior executives. They often are established with significant past service liabilities and no assets.

- The funded ratio of a plan is determined by dividing its actuarial assets by its accrued actuarial liabilities, where the actuarial valuation is based on the assumption that the plan is a going concern. A plan with a funded ratio of less than 1.00 has an unfunded liability. In our previous report, 49 percent of plan beneficiaries belonged to plans that had a funded ratio of 1.00 or more. Currently 46 percent of plan beneficiaries participate in plans with a funded ratio of 1.00 or more. (Table 11)

- The solvency ratio of a plan also is calculated by dividing its assets by its liabilities, except that the values are determined as if the plan had terminated. Having insufficient assets on plan termination may result in a reduction of benefits; therefore, the solvency ratio is an important measure of risk. Fifty-seven percent of the plans meet this test of solvency compared to 72 percent in our previous report. In terms of membership, 81 percent of plan beneficiaries participate in a plan with a solvency ratio greater than 1.00. In our previous report, 87 percent of beneficiaries belonged to a plan having a solvency ratio greater than 1.00.

- As well, previously 6 percent of beneficiaries participated in a plan that had a solvency ratio greater than 1.24 while currently about 3 percent of plan members belong to a plan with a solvency ratio in this range. (Table 12)

- The actuarial method most frequently used by actuaries for determining the value of liabilities on a going concern basis is the unit credit method. The method was used in 91% of the valuations. (Table 13)

- Assets were most frequently valued on a market value basis, with actuaries using market value or adjusted market value over 99 percent of the time. Pure market value was used 82% of the time. (Table 14)

- The use of a valuation basis other than market value has resulted in the actuarial value of assets exceeding the market value of assets by about 31 percent. This is a slight change from the previous report where the use of market value as a valuation basis exceeded the actuarial value of assets by about 33 percent. (Table 15)

- In the previous report 76 percent of plans used the 1983 Group Annuity Mortality Table as the basis for the assumption with respect to mortality. The current report shows that 32 percent of plans are now using GAM 94, with 66 percent continuing to use GAM 83 for the mortality assumption. (Table 16)

- The long-term interest rate assumed by actuaries fell within a relatively tight range. Actuaries used either 7.0% or 7.5% in valuing about 65 percent of the plans. However, it should be noted that of the 75 plans using an interest assumption of 7.50 percent, seventy-three were designated pension plans where the assumptions are prescribed by the *Income Tax Regulations*. Fifty-three valuations used an interest rate of less than 7.0% compared to 50 valuations in the previous report. (Table 17)

- Of the 34 plans that required a salary projection, 18 used a rate between 4.5% and 5.0% per annum. (Table 18) Last report, 7 of 34 plans were valued with a salary assumption within this range. This report, 22 of 34 plans had a salary assumption of less than 5% compared to 18 of 34 plans in the previous report. Last report, 15 of 34 plans had a salary/interest spread of more than 2%. This report, 16 of 34 plans had a spread that exceeded 2%.(Tables 19 and 20)

Table 6

Membership of Defined Benefit Plans						
Plan Type	**# of Plans**	**Active Members**	**Inactive Members**	**Deferred Members**	**Pensioners**	**Total Beneficiaries**
Final Average	17	20,662	1,432	2,897	8,147	33,138
Average Best	18	48,424	1,879	3,617	11,100	65,020
Career Average	11	1,873	0	407	454	2,734
Flat Benefit	19	6,332	113	4,026	1,994	12,465
Designated Plan	83	133	0	5	16	154
Hybrid	4	460	82	54	123	719
Totals	**152**	**77,884**	**3,506**	**11,006**	**21,834**	**114,230**

Table 7				Total Plan Liabilities by Plan Type			
Type of Plan	# of Plans	Active Members	Total Ben.	Ongoing Liabilities	Average Per Plan	Average Per Active Member	Average Per Ben.
Final Average	17	20,662	33,138	$2,550,010,210	$150,000,601	$123,415	$76,951
Average Best	18	48,424	65,020	$4,645,732,131	$258,096,230	$95,939	$71,451
Career Average	11	1,873	2,734	$109,279,289	$9,934,481	$58,345	$39,970
Flat Benefit	19	6,332	12,465	$425,547,917	$22,397,259	$67,206	$34,139
Designated Plan	83	133	154	$35,389,822	$426,383	$266,089	$229,804
Hybrid	4	460	719	$15,611,132	$3,902,783	$33,937	$21,712
Total	**152**	**77,884**	**114,230**	**$7,781,570,501**	**$51,194,543**	**$99,912**	**$68,122**

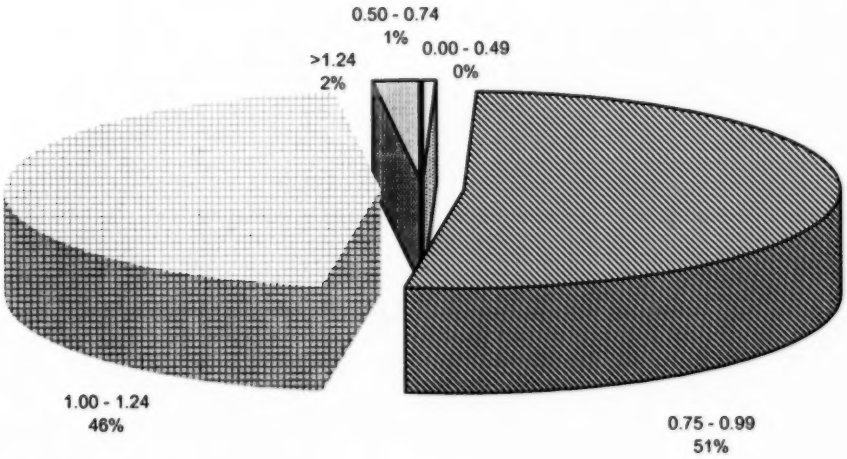
Table 8				Actuarial Value of Plan Assets by Plan Type			
Type of Plan	# of Plans	Active Members	Total Ben.	Plan Assets	Average Per Plan	Average Per Active Member	Average Per Ben.
Final Average	17	20,662	33,138	$2,603,162,559	$153,127,209	$125,988	$78,555
Average Best	18	48,424	65,020	$4,854,885,690	$269,715,872	$100,258	$74,668
Career Average	11	1,873	2,734	$103,451,153	$9,404,650	$55,233	$37,839
Flat Benefit	19	6,332	12,465	$388,992,873	$20,473,309	$61,433	$31,207
Designated Plan	83	133	154	$32,575,484	$392,476	$244,928	$211,529
Hybrid	4	460	719	$17,405,404	$4,351,351	$37,838	$24,208
Total	**152**	**77,884**	**114,230**	**$8,000,473,163**	**$52,634,692**	**$102,723**	**$70,038**

Table 9				Unfunded Liabilities by Plan Type			
Plan Type	**# of Plans**	**Active Members**	**Total Ben.**	**Unfunded Liabilities**	**Average Per Plan**	**Average Per Active Member**	**Average Per Ben.**
Final Average	8	6,442	10,399	$85,529,750	$10,691,219	$13,277	$8,225
Average Best	4	29,548	40,297	$139,283,200	$34,820,800	$4,714	$3,456
Career Average	7	905	1,253	$10,186,834	$1,455,262	$11,256	$8,130
Flat Benefit	14	4,708	7,779	$39,611,870	$2,829,419	$8,414	$5,092
Designated Plan	60	89	90	$5,711,129	$95,185	$64,170	$63,457
Hybrid	1	147	234	$115,054	$115,054	$ 783	$ 492
Total	**94**	**41,839**	**60,052**	**$280,437,837**	**$2,983,381**	**$6,703**	**$4,670**

Table 10				Surplus Assets by Plan Type			
Plan Type	**# of Plans**	**Active Members**	**Total Ben.**	**Surplus Assets**	**Average Per Plan**	**Average Per Active Member**	**Average Per Ben.**
Final Average	9	14,220	22,739	$138,682,099	$15,409,122	$9,753	$6,099
Average Best	14	18,876	24,723	$348,436,759	$24,888,340	$18,459	$14,094
Career Average	4	968	1,481	$4,358,698	$1,089,675	$4,503	$2,943
Flat Benefit	5	1,624	4,686	$3,056,826	$611,365	$1,882	$ 652
Designated Plan	23	44	64	$2,896,791	$125,947	$65,836	$45,262
Hybrid	3	313	485	$1,909,326	$636,442	$6,100	$3,937
Total	**58**	**36,045**	**54,178**	**$499,340,499**	**$8,609,319**	**$13,853**	**$9,217**

Table 11

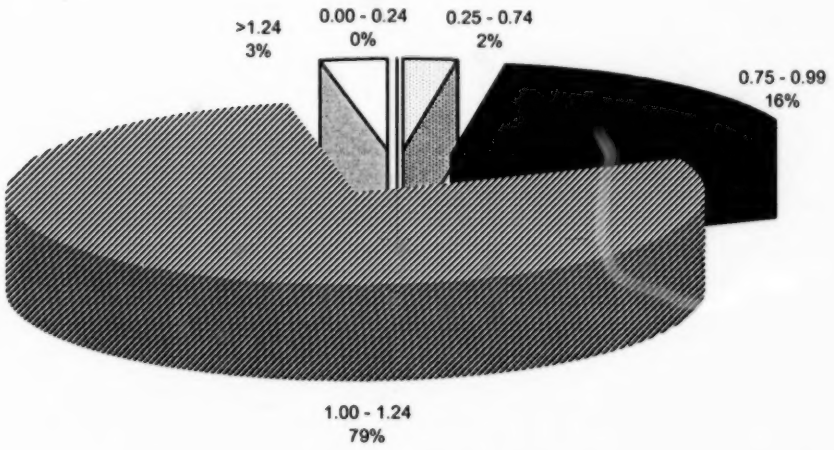
Funded Ratio (Assets/Liabilities)		
Funded Ratio	**# of Plans**	**# of Beneficiaries**
0.00 - 0.49	7	12
0.50 – 0.74	35	700
0.75 - 0.99	53	59,342
1.00 - 1.24	45	52,013
>1.24	12	2,163
Total	**152**	**114,230**



Funded Ratio as a Percentage of Beneficiaries

Table 12

Solvency Ratio (Assets/Liabilities)		
Solvency Ratio	**# of Plans**	**# of Beneficiaries**
0.00-0.24	4	8
0.25 – 0.74	21	2,749
0.75 – 0.99	41	18,829
1.00 – 1.24	53	89,077
>1.24	33	3,567
Total	**152**	**114,230**



Solvency Ratio as a Percentage of Beneficiaries

Table 13	Method of Valuing Liabilities						
Plan Type	Final Average	Average Best	Career Average	Flat Benefit	Designated Plan	Hybrid	Total
Method							
Projected Unit Credit	15	10	5	5	79	3	**117**
Unit Credit			6	10	4	1	**21**
Attained Age	2	6		2			**10**
Aggregate Cost							**0**
Entry Age		2		2			**4**
Total	**17**	**18**	**11**	**19**	**83**	**4**	**152**

Table 14	Method of Valuing Assets						
Plan Type	Final Average	Average Best	Career Average	Flat Benefit	Designated Plan	Hybrid	Total
Method							
Book					1		**1**
Adjusted Book		1					**1**
Market	9	9	8	13	81	4	**124**
Adjusted Market	8	8	3	6	1		**26**
Blend of Book/Market							**0**
Total	**17**	**18**	**11**	**19**	**83**	**4**	**152**

Table 15

Comparison of Market Value to Actuarial Value of Assets			
Plan Type	**# of Plans**	**Market Value**	**Actuarial Value**
Final Average	17	$2,590,520,003	$2,603,162,559
Average Best	18	$2,969,824,822	$4,854,885,690
Career Average	11	$104,185,601	$103,451,153
Flat Benefit	19	$385,046,840	$388,992,873
Designated Plan	83	$31,929,663	$32,575,484
Hybrid	4	$17,405,404	$17,405,404
Total	**152**	**$6,098,912,333**	**$8,000,473,163**

Table 16

Mortality Table Used	
Table Used	**# of Plans**
GAM 94 Static	13
GAM 94 UP	23
GAM 94 Adjusted	13
GAM 83	63
GAM 83 Adjusted	38
GAM 71	2
Total	**152**

Table 17

Interest Assumption Used	
Rate	**# of Plans**
4.50	1
5.50	2
5.75	2
6.00	14
6.25	3
6.50	25
6.75	6
7.00	24
7.50	75
Total	**152**

Table 18

Salary Assumption Used (Final Average and Average Best Plans)	
Rate	**# of Plans**
2.50	1
3.00	1
3.25	2
3.50	4
4.00	2
4.25	1
4.50	11
5.00	8
5.25	2
5.39	1
6.00	1
Total	**34**

Table 19

Spread Between Interest and Salary Assumptions (Final Average and Average Best Plans)	
Difference	**# of Plans**
0.75	1
1.00	2
1.25	2
1.50	2
1.61	1
2.00	10
2.50	7
2.75	1
3.00	3
3.50	3
3.75	1
4.00	1
Total	**34**

Table 20

Differential	4.00	3.75	3.50	3.00	2.75	2. 50	2.00	1.61	1.50	1.25	1.00	0.75	Total
Interest Rate													
5.50											1		**1**
6.00			1		1		1		1		1		**5**
6.50				2		1	4		1	2			**10**
6.75						1						1	**2**
7.00	1	1	2			4	5	1					**14**
7.50				1		1							**2**
Total	**1**	**1**	**3**	**3**	**1**	**7**	**10**	**1**	**2**	**2**	**2**	**1**	**34**

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